

## String.prototype.split(): 用指定分隔符分割字符串

```
1      String.prototype.split = function (separator, limit) {
2          //如果没有提供分隔符，直接把字符串作为数组的一个元素并返回
3          if (typeof separator === 'undefined') {
4              return [this.valueOf()];
5          }
6          //保证limit是一个整数
7          if (limit) {
8              limit = Number.parseInt(limit);
9          }
10         //定义一个数组来缓存我们分割出来的元素
11         let arr = [];
12
13         let tmp = '';
14         for (let n = 0; n < this.length; n++) {
15             let match = this[n];
16             //分隔符的长度是任意的--》需要拼接并判断是不是分隔符
17             for (let j = n + 1; j < n + separator.length; j++) {
18                 match += this[j];
19             }
20             //判断是不是分隔符
21             if (match === separator) {
22                 arr.push(tmp);
23                 tmp = '';
24                 //从分隔符的结束位置开始循环
25                 n += separator.length - 1;
26                 //进入下一次循环
27                 continue;
28             }
29             //在遇到分隔符之前把字符缓存到tmp里面
30             tmp += this[n];
31         }
32         //最后一个分隔符后面的tmp
33         arr.push(tmp);
34         return limit ? arr.slice(0, limit) : arr;
35     }
```

```

36     let str = ',abc,def,g,h,j,';
37     console.log(str.split(','));
38     console.log(str.split(',', 3));
39     console.log(str.split('-'));
40     console.log(str.split('ab'));

```

## String.prototype.padEnd(): 用指定字符从末尾填充

```

1  String.prototype.padEnd = function (targetLength, padString = ' ') {
2      //逻辑的严谨性和健壮性
3      if(padString === null || padString === '' || Number.isNaN(padString) ){
4          return this.valueOf();
5      }
6      //填充到指定的目标长度
7      //最大化填充用的字符串
8      let padstr = '';
9      for(let i=0; i < Math.ceil(targetLength / padString.length); i++){
10         padstr += padString;
11     }
12     console.log(padstr);
13     //从开始位置去截取需要的字符串
14     let tmp = '';
15     for(let i=0; i < targetLength - this.length; i++){
16         tmp += padstr[i];
17     }
18     return this.valueOf() + tmp;
19 }
20
21 let str = 'abc';
22 console.log(str.padEnd(2, '000')); //abc
23 console.log(str.padEnd(4, '000')); //abc0
24 console.log(str.padEnd(5, '000')); //abc00
25 console.log(str.padEnd(7, '000')); //abc0000

```

## String.prototype.charAt()获取指定字符在第几位

```

2      String.prototype.mycharAt = function(index){
3          var newStr = "";
4          var index = index;
5          var arr = [];
6          for(var i = 0;i < this.length;i++){
7              newStr += this[i];
8          }
9          return newStr[index];
10     }
11     var str = " hello world";
12     console.log(str.mycharAt(20));

```

## String.prototype.concat() 拼接字符串

```

1  String.prototype.myconcat = function(str){
2      var newStr = "";
3      for(var i = 0;i < this.length;i++){
4          newStr += this[i];
5      }
6      return newStr + str;
7  }
8  var str1 = "hello";
9  console.log(str1.myconcat(" hell"));
10 String.prototype.charCodeAt()

```

## String.prototype.startsWith() 获取字符串是否以...开始

```

1  String.prototype.mystartsWith = function(char){
2      var newStr = "";
3      var arr = [];
4      for(var i = 0;i < this.length;i++){
5          newStr += this[i];
6      }
7      var firstStr = newStr[0];
8      //一次判断，如果传参为单字符等于字符串最后一位
9      if(firstStr == char){
10         return true;

```

```

11         }
12         //二次判断，如果传参为字符串，判断是否为字符串最后一个单词
13         arr = newStr.split(" ");
14         if(arr[0] == char){
15             return true;
16         }
17         return false;
18     }
19     var str = "blu one?";
20     console.log(str.mystartsWith('blu'));

```

## String.prototype.endsWith() 获取字符串是否以...结束

```

1  String.prototype.myendsWith = function(char){
2      var newStr = "";
3      var arr = [];
4      for(var i = 0;i < this.length;i++){
5          newStr += this[i];
6      }
7      var lastStr = newStr[newStr.length - 1];
8      //一次判断，如果传参为单字符等于字符串最后一位
9      if(lastStr == char){
10         return true;
11     }
12     //二次判断，如果传参为字符串，判断是否为字符串最后一个单词
13     arr = newStr.split(" ");
14     if(arr[arr.length - 1] == char){
15         return true;
16     }
17     return false;
18 }
19 var str = "blu one?";
20 console.log(str.myendsWith('one?'));
21

```

## String.prototype.includes() 字符串是否包括...

```

1 String.prototype.myincludes = function(char){
2     var newStr = "";
3     var arr = [];
4     for(var i = 0;i < this.length;i++){
5         newStr += this[i];
6     }
7     //一次判断，如果传参为单字符
8     for(var i = 0;i < newStr.length;i++){
9         if(newStr[i] == char){
10             return true;
11         }
12     }
13     //二次判断，如果传参为字符串
14     arr = newStr.split(" ");
15     for(var i = 0;i < arr.length;i++){
16         if(arr[i] == char){
17             return true;
18         }
19     }
20     return false;
21 }
22 var str = "blu one";
23 console.log(str.myincludes('blue'));

```

## String.prototype.indexOf() 指定字符的下标

```

1 String.prototype.myIndexOf = function(char){
2     var newStr = "";
3     var index = -1;
4     for(var i = 0;i < this.length;i++){
5         newStr += this[i];
6     }
7     for(var i = 0;i < newStr.length;i++){
8         if(newStr[i] == char){
9             index = i;
10            break;
11        }

```

```
12         }
13         return index;
14     }
15     var str = "123111222122";
16     console.log(str.indexOf(1));
```

## String.prototype.lastIndexOf() 指定字符最后出现的下标

```
1  String.prototype.mylastIndexOf = function(char){
2      var newStr = "";
3      var index;
4      for(var i = 0;i < this.length;i++){
5          newStr += this[i];
6      }
7      for(var i = 0;i < newStr.length;i++){
8          if(newStr[i] == char){
9              index = i;
10         }
11     }
12     return index;
13 }
14 var str = "123111222122";
15 console.log(str.mylastIndexOf(1));
```

## String.prototype.replace() 替换指定字符串

```
1  String.prototype.myreplace = function(num1,num2){
2      var newStr = "";
3      var returnStr = "";
4      for(var i = 0;i < this.length;i++){
5          newStr += this[i];
6      }
7      var arr = newStr.split(' ');
8      for(var i = 0;i < arr.length;i++){
9          if(arr[i].includes(num1)){
10             arr[i] = num2;
11             break;
12         }
13     }
14     returnStr = arr.join(' ');
15     return returnStr;
16 }
```

```

12         }
13     }
14     for(var i = 0;i < arr.length;i++){
15         returnStr += arr[i] + " ";
16     }
17     return returnStr;
18 }
19 const str = 'The quick brown fox jumps over the lazy dog If the dog reacted,
was it really lazy?';
20 console.log(str.myreplace('dog','cat'));

```

## String.prototype.replaceAll() 替换所有符合条件的字符

```

1  String.prototype.myreplaceAll = function(num1,num2){
2      var newStr = "";
3      var returnStr = "";
4      for(var i = 0;i < this.length;i++){
5          newStr += this[i];
6      }
7      var arr = newStr.split(' ');
8      for(var i = 0;i < arr.length;i++){
9          if(arr[i].includes(num1)){
10             arr[i] = num2;
11         }
12         returnStr += arr[i] + " ";
13     }
14     return returnStr;
15 }
16 const str = 'The quick brown fox jumps over the lazy dog. If the dog reacted,
was it really lazy?';
17 console.log(str.myreplaceAll('dog','cat'));

```

## String.prototype.substr() //截取字符串

```

1  String.prototype.mysubstr = function(start,length){
2      var newStr = "";
3      var returnStr = "";
4      for(var i = 0;i < this.length;i++){

```

```
5         newStr += this[i];
6     }
7     //没长度有开始值
8     if(typeof length == "undefined"){
9         //正数
10        if(start > 0){
11            if(start >= newStr.length){
12                return "";
13            }else{
14                for(var i = start;i < newStr.length;i++){
15                    returnStr += newStr[i];
16                }
17                return returnStr;
18            }
19            //负数
20        }else if(start < 0){
21
22            if(Math.abs(start) > newStr.length){
23                return newStr;
24            }else{
25                for(var i = newStr.length + start;i < newStr.length;i++){
26                    returnStr += newStr[i];
27                }
28                return returnStr;
29            }
30        }
31    }
32    //有长度有开始位置
33    else{
34        //开始位置为正数
35        if(start > 0){
36            if(start <= newStr.length){
37                for(var i = start;i <= length;i++){
38                    returnStr += newStr[i];
39                }
40                return returnStr;
41            }else{
42                return "";
43            }
44        }else if(start < 0){
```



```

45         if(Math.abs(start) > newStr.length){
46             for(var i = 0;i < length;i++){
47                 returnStr += newStr[i];
48             }
49             return returnStr;
50         }else{
51             var count = 0;
52             for(var i = newStr.length + start;i <=newStr.length;i++){
53                 count++;
54                 returnStr += newStr[i];
55                 if(count == length){
56                     return returnStr;
57                 }
58             }
59         }
60     }
61 }
62 }
63 var str = "abcdefghij";
64 console.log(str.mysubstr(20,2));

```

## String.prototype.trim() 去除字符串所有空格

```

1  String.prototype.mytrim = function(str){
2      var newStr = "";
3      var returnStr = "";
4      for(var i = 0;i < this.length;i++){
5          newStr += this[i];
6      }
7      for(var i = 0;i < newStr.length;i++){
8          if(newStr[i] == " "){
9              continue;
10         }else{
11             returnStr += newStr[i];
12         }
13     }
14     return returnStr;
15 }

```

```
16     var a = "abc 12 3  a";
17     console.log(a.mytrim());
```

## String.prototype.toUpperCase() 转换成大写字母

```
1  String.prototype.mytoUpperCase = function(){
2      var newStr = "";
3      var returnStr = "";
4      for(var i = 0;i < this.length;i++){
5          newStr += this[i];
6      }
7      var temp = 0;
8      for(var i = 0;i < newStr.length;i++){
9          if(newStr[i].charCodeAt() < 97 && newStr[i].charCodeAt() > 64){
10             temp = newStr[i].charCodeAt() + 32;
11             returnStr += String.fromCharCode(temp);
12         }else{
13             returnStr += str[i];
14         }
15     }
16     return returnStr;
17 }
18 var str = "ABC";
19 console.log(str.mytoUpperCase());
```

## String.prototype.toLowerCase() 转换成小写字母

```
1  String.prototype.mytoLowerCase = function(){
2      var newStr = "";
3      var returnStr = "";
4      for(var i = 0;i < this.length;i++){
5          newStr += this[i];
6      }
7      var temp = 0;
8      for(var i = 0;i < newStr.length;i++){
9          if(newStr[i].charCodeAt() > 96){
10             temp = newStr[i].charCodeAt() - 32;
```

```

11         returnStr += String.fromCharCode(temp);
12     }else{
13         returnStr += str[i];
14     }
15 }
16 return returnStr;
17 }
18 var str = "ab c111 ";
19 console.log(str.mytoLowerCase());

```

## String.prototype.repeat():

```

1 String.prototype.repeat = function (n) {
2     let str = '';
3     for (let m = 1; m <= n; m++) {
4         str += this;
5     }
6     return str;
7 }
8
9 let str = ' abc ';
10 console.log(str.repeat(3)); //abc abc abc

```

## js判断字符串是否是回文的三种方法

```

1 function fn1(str){
2     let strReverse = str.split('').reverse().join('')
3     return str == strReverse ? true : false
4 }

```

```

1 function fn2(str){
2     let len = str.length
3     if(len == 0 || len == 1) return true
4     if(str.charAt(0) != str.charAt(len-1)){
5         return false

```

```
6     }else{
7         return fn2(str.substring(1, len-1))
8     }
9 }
```

```
1 function fn3(str){
2     let len = str.length
3     for(let i = 0, j = len-1; i <= j; i++,j--){
4         if(str[i] != str[j]){
5             return false
6         }
7     }
8     return true
9 }
```